Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

Applicant/Contact name and address: **GREGORY A WAITE**
2421 4TH AVE
SCOTTSBLUFF, NE 69361

1. *Type of action*: **APPLICATION FOR BENEFICIAL WATER USE PERMIT NO. 43C-30042419**

2. *Water source name*: **GROUNDWATER**

3. *Location affected by project*: **SW¼ NW¼ NW¼ of Sec. 14, T4S, R18E, LOT # 19 IN STILLWATER COUNTY.**

4. *Narrative summary of the proposed project, purpose, action to be taken, and benefits*:
This project is for a total volume of 1.5 acre-feet per year (AF/YR) at a rate of 25 GPM for domestic use from January 1st to December 31st inclusive each year. The period of use is requested due to the need for domestic water. The requested water will be used for household water and to water less than one quarter acre lawn.

The DNRC will issue a provisional water use permit if all criteria for issuance under §§ 85-2-311, MCA are met.

5. Agencies consulted during preparation of the Environmental Assessment:
(include agencies with overlapping jurisdiction)
Montana Natural Heritage Program
Montana Historic Preservation Office
Montana Department of Fish Wildlife & Parks (MFWP)
Montana Department of Environmental Quality (MDEQ)

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity **-** *Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.*

Determination: **No significant impact.**
This application will utilize groundwater at a rate of ~25 gpm. This well is about 700 feet from the nearest Unnamed Tributary to Horse Creek. There is an on going study in this area to determine if ground water developments within the Horse Creek watershed area and more specifically the Crow Chief Meadows subdivision will have a negative impact on the water quantity.

Water quality **-** *Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.*

Determination: **No significant impact.**
A water quality test was submitted with this application and on going monitoring within and around the Horse Creek watershed is in progress. The well was drilled by a licensed well driller that appears to have complied with Montana Board of Well Contractors as well as local guidelines. This well is about 500 feet from the nearest lot that has a septic system. There are no water quality issues expected as a result of this water use.

Groundwater **-** *Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.*

Determination: **No significant impact.**
There is an on going study to determine if well development within the Horse Creek area will have a negative impact on the groundwater quantity available in the aquifer. There are four publications addressing this area with a focus on water availability to address requested volume for water right applications. At this point the literature only suggests water is available through presented supporting data. The well for this application is located on lot #19 of the Crow Chief Subdivision and is approximately 700 feet from an Unnamed Tributary of Horse Creek.

DIVERSION WORKS - *Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.*

Determination: **No significant impact.**
The groundwater well was completed on 7/15/2008 by Pro Pump and Equipment Inc. license number WWC-508. A submersible ½ horse power pump will be used to divert water from the well. The well is 124 feet deep and has a 6.6 inch steel casing down to 18 feet and a PVC- sched 40 plastic 4 inch casing from 18 feet to 124 feet. Water will be conveyed directly to the house for domestic use. The applicant has also agreed to monitor and report records of volume and water level regularly with the installation of an inline flow meter. These measurements will be reported to the Montana Department of Natural Resources and Conservation on an annual basis (November 30th). The project will be utilizing groundwater; therefore, there are no known significant impacts to channels, barriers, dams, riparian areas or modifications in flow.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species **-** *Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."*

Determination: **The Montana Natural Heritage Program has identified some species of concern within this proposed project area: the Greater Short-horned Lizard (*Phrynosoma hernandesi*), and the Bobolink (*Dolichonyx oryzivorus*). It is not expected that this proposed well project will adversely impact any of these species.**

Wetlands **-** *Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.*

Determination: **No significant impact.**
No wetlands claimed in the project area.

Ponds **-** *For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.*

Determination: **No significant impact.**
No ponds claimed in the project area.

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - *Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.*

Determination: **No significant impact.**

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS - *Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.*

Determination: **No significant impact.**
There will be minimal soil disturbance during construction of this proposed project and there will be little likelihood for spread or establishment of noxious weeds. The landowner is responsible for controlling any establishment of noxious weed as a result of disturbance.

AIR QUALITY - *Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.*

Determination: **No significant impact.**
No deterioration of air quality or adverse effects on vegetation due to increased air pollutants from this project are expected.

HISTORICAL AND ARCHEOLOGICAL SITES - *Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project.*

Determination: **No significant impact.**
The State of Montana Historic Preservation Office (SHPO), did not identify any historic or archeological sites of record in the proposed project area. This proposed use of water is

not expected to have any significant impact on historical or archeological sites in the area.

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - *Assess any other impacts on environmental resources of land, water and energy not already addressed.*

Determination: **No significant impact.**
There should be no significant impacts on other environmental resources of land, energy, and water from this proposed use.

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - *Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.*

Determination: **No significant impact.**
This proposed use is not inconsistent with any locally adopted environmental plans and goals for Stillwater County.

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - *Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.*

Determination: **No significant impact.**
There should be no significant impacts on recreational or wilderness activities from this proposed use.

HUMAN HEALTH - *Assess whether the proposed project impacts on human health.*

Determination: **No significant impact.**
There should be no significant impact on human health from this proposed use.

PRIVATE PROPERTY - *Assess whether there are any government regulatory impacts on private property rights.*
*Yes___ No _**X**_ If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights*.

Determination: **No significant impact**.

OTHER HUMAN ENVIRONMENTAL ISSUES - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

Impacts on:

(a) *Cultural uniqueness and diversity?* **No significant impact.**

(b) *Local and state tax base and tax revenues?* **No significant impact.**

(c) *Existing land uses?* **No significant impact.**

(d) *Quantity and distribution of employment?* **No significant impact.**

(e) *Distribution and density of population and housing?* **No significant impact.**

(f) *Demands for government services?* **No significant impact.**

(g) *Industrial and commercial activity?* **No significant impact.**

(h) *Utilities?* **No significant impact.**

(i) *Transportation?* **No significant impact.**

(j) *Safety?* **No significant impact.**

(k) *Other appropriate social and economic circumstances?* **No significant impact.**

2. *Secondary and cumulative impacts on the physical environment and human population:*

Secondary Impacts: **No significant impact.**

Cumulative Impacts: **No significant impact.**

3. *Describe any mitigation/stipulation measures:* **The applicant has stated they have complete control over the water flow from the well. The mitigation plan established by the applicant states; if my well has an adverse effect on prior water users, I would first discontinue the small amount of outside irrigation on my property. If this does not solve the problem I would discontinue all water usage from the aquifer.**

4. *Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:* **The only alternative to drilling a well in this area for the purposes of obtaining drinking and domestic water would be to build an above ground storage tank and have water trucked in. This would be very costly and impractical.**

The "no action" alternative would mean the applicant would not have water available for lawn & garden or domestic use and would not be able to live on this property.

PART III. Conclusion

1. *Preferred Alternative:* **The preferred alternative would be to allow use of the well under the condition that there will be no adverse impacts to any senior water rights.**

2. *Comments and Responses:* **None to report.**

3. *Finding:*
*Yes___ No_**X**_ Based on the significance criteria evaluated in this EA, is an EIS required?* **No EIS is required.**

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action: **No significant environmental impacts were identified, therefore no EIS is required.**

Name of person(s) responsible for preparation of EA:

Name: **Mark V Corrao**
Title: **Water Conservation Specialist**
Date: **November 17, 2008**